AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior listings and versions of claims in this application.

1. (Currently Amended) An isolated peptide fragment of the ~~a~~ natural cytotoxicity receptor NKp46 ~~of an NK cell~~, comprising a ~~linker~~ peptide ~~connecting~~ derived from D2 of the extracellular domain of the NKp46 receptor ~~to the transmembrane portion of the receptor~~, wherein the isolated peptide fragment is about 10-100 amino acid residues in length and wherein said peptide fragment exhibits at least one activity selected from binding to a viral infected cell or binding to a tumor cell.

2. (Previously Presented) The peptide fragment of claim 1 comprising at least one glycosylated residue.

3. (Currently Amended) The peptide fragment of claim 1, derived from the D2 domain of NKp46 ~~wherein the natural cytotoxicity receptor of the NK cell is selected from NKp46 and NKp~~44.

4. (Currently Amended) The isolated peptide fragment of the human NKp46 receptor according to claim 3 ~~comprising the amino acid sequence as set forth in SEQ ID NO:3, or an analog thereof~~, the peptide having the ability to bind to target cells selected from viral-infected cells and tumor cells, with the proviso that said peptide is other than SEQ ID NOS:1 and 2.

5. (Previously Presented) The peptide fragment of claim 4 wherein the target cell is of a warm-blooded vertebrate.

6. (Previously Presented) The peptide fragment of claim 5 wherein the target cell is of human origin.

7. (Previously Presented) The peptide fragment of claim 4 comprising a minimal epitope of NKp46 receptor having ability to bind to viral-infected cells.

8. (Previously Presented) The peptide fragment of claim 7 comprising a glycosylated residue corresponding to threonine at position 225 of isoform a of the human NKp46 receptor.

9. (Previously Presented) The peptide of claim 7 wherein the glycosylated residue comprises sialic acid.

10. (Previously Presented) The peptide fragment of claim 4 comprising from about 25 to 75 amino acids.

11. (Previously Presented) The peptide fragment of claim 4 comprising from about 30 to 60 amino acids.

Claims 12-19. (Cancelled)

20. (Currently Amended) A fusion protein comprising an isolated peptide fragment of the ~~a~~ natural cytotoxicity receptor NKp46 ~~of an NK cell~~, and further comprising a molecule selected from an immunoglobulin (Ig) molecule or a fragment thereof, and a cytotoxic substance; the peptide fragment comprising a ~~linker~~ peptide ~~connecting~~ derived from D2 of the extracellular domain of the NKp46 receptor ~~to the transmembrane portion of the receptor~~, wherein the peptide fragment is about 10-100 amino acid residues in length; wherein said fusion protein comprising said peptide fragment exhibits at least one activity selected from binding to a viral infected cell or binding to a tumor cell; and wherein said fusion protein is other than the fusion proteins of SEQ ID NOS:13-16.

21. (Original) The fusion protein of claim 20 manufactured by recombinant DNA technology or chemical synthesis.

22. (Previously Presented) The fusion protein of claim 20 comprising the peptide fragment covalently conjugated to a molecule selected from an immunoglobulin (Ig) molecule or a fragment thereof, and a cytotoxic substance.

23. (Previously Presented) The fusion protein of claim 22 wherein the peptide fragment is covalently conjugated to the Fc fragment of said immunoglobulin molecule.

Claims 24-33. (Cancelled)

34. (Withdrawn, Currently Amended) A method for treating a viral disease in a subject comprising administering to a subject in need thereof a therapeutically effective amount of a pharmaceutical composition comprising as an active ingredient ~~a peptide wherein said peptide is~~ an isolated peptide fragment according to claim 1 ~~of a natural cytotoxicity receptor of an NK cell, comprising the linker peptide connecting the extracellular domain of the receptor to the transmembrane portion of the receptor, said peptide exhibiting at least one activity selected from binding to a viral infected cell or binding to a tumor cell~~.

35. (Withdrawn) The method of claim 34 for treating a viral disease in a subject comprising administering to a subject in need thereof a therapeutically effective amount of a pharmaceutical composition comprising as an active ingredient a peptide according to claim 4.

Claims 36 and 37. (Cancelled)

38. (Withdrawn, Currently Amended) A method for treating a malignant disease in a subject comprising administering to a subject in need thereof a therapeutically effective amount of a pharmaceutical composition comprising as an active ingredient ~~a peptide wherein said peptide is~~ an isolated peptide fragment according to claim 1 ~~of a natural cytotoxicity receptor of an NK cell, comprising the linker peptide connecting the extracellular domain of the receptor to the transmembrane portion of the receptor, said peptide exhibiting at least one activity selected from binding to a viral infected cell or binding to a tumor cell~~.

39. (Withdrawn) The method of claim 38 for treating a malignant disease in a subject comprising administering to a subject in need thereof a therapeutically effective amount of a pharmaceutical composition comprising as an active ingredient a peptide according to claim 4.

40. (Withdrawn) A monoclonal antibody (mAb) specific for an epitope in the distal domain of NKp46 receptor.

41. (Withdrawn) The monoclonal antibody of claim 40, wherein said antibody is produced by a hybridoma denoted as 461-G1.

42. (Withdrawn) The monoclonal antibody of claim 40, wherein the antibody is capable of selectively removing NKp46-positive cells.

43. (Withdrawn) A method for selective removal of Natural Killer (NK) cells from a biological sample comprising contacting the biological sample with an antibody specific for an epitope of NKp46 receptor or immunoreactive fragments thereof, under condition appropriate for immune complex formation, and removing the immune complex formed from the biological sample.

44. (Withdrawn) The method of claim 43, wherein said biological sample is selected from the group consisting of peripheral blood, plasma, bone marrow aspirates, lymphoid tissues, or cells isolated from plasmapheresis.

45. (Withdrawn) The method of claim 44, wherein said biological sample is derived from a subject who would benefit from a decrease in NK cell activity.

46. (Withdrawn) The method of claim 36, wherein said subject is a recipient of transplant tissue, a subject suffering from an autoimmune disease, or a subject requiring gene therapy treatment using a viral vector.

47. (Currently Amended) A variant polypeptide ~~comprising~~ of the natural cytotoxicity receptor NKp46 ~~receptor polypeptide or an active fragment thereof having,~~ the variant comprising at least a single amino acid substitution in an epitope required for the

recognition of viral-infected cells or tumor cells, wherein the epitope is in the proximal domain of the NKp46 receptor.

48. (Currently Amended) The variant polypeptide of claim 47, wherein the single amino acid substitution is at an amino acid residue selected from the group consisting of Threonine 125, Threonine 225 and Asparagine 216 within the D2 domain of NKp46 isoform a ~~is Threonine 225 replaced by an amino acid residue selected from the group consisting of Serine, Alanine and Asparagine~~.

49. (New) The variant polypeptide of claim 48, wherein the single amino acid substitution is selected from the group consisting of: Threonine 225 replaced by an amino acid residue selected from the group consisting of Serine, Alanine and Asparagine; Threonine 125 replaced by Alanine, and Asparagine 216 replaced by Alanine.

50. (New) The variant polypeptide of claim 47, wherein the amino acid substitution is at one of more glycosylation sites within the proximal domain of the NKp46 receptor.

51. (New) The variant polypeptide of claim 47, comprising at least one glycosylated residue.

52. (New) The variant polypeptide of claim 51, wherein the glycosylated residue comprises sialic acid.

53. (New) The variant polypeptide of claim 47, wherein said polypeptide exhibits at least one activity selected from binding to a viral infected cell and binding to a tumor cell.

54. (New) The variant polypeptide of claim 53, having the ability to bind to viral-infected cells.

55. (New) The variant polypeptide of claim 53, having the ability to bind to tumor cells.

56. (New) The variant polypeptide of claim 53, comprising a glycosylated Threonine residue corresponding to Threonine 225 of isoform a of the human NKp46 receptor.

57. (New) The variant polypeptide of claim 56, wherein the glycosylated residue comprises sialic acid.

58. (New) A fusion protein comprising the variant polypeptide of claim 47, and further comprising an immunoglobulin (Ig) molecule or a fragment thereof.

59. (New) The fusion protein of claim 58, comprising the Fc fragment of said immunoglobulin molecule.